

**CENTRAL POWER RESEARCH INSTITUTE  
(MEMBER OF STL)**




**CPRI**

**TEST REPORT**

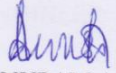
<b>Test Report Number</b>	S2140703	<b>Date</b> 12.7 AUG 2014
<b>Name &amp; address of the Customer</b>	M/s Krypton Power Controls (India) Pvt.Ltd., 248, Swaran Park Udyog Nagar, Mundka, New Delhi-110 041	
<b>Name &amp; address of the Manufacturer</b>	M/s Krypton Power Controls (India) Pvt.Ltd., 248, Swaran Park Udyog Nagar, Mundka, New Delhi-110 041	
<b>Particulars of sample tested</b>	415V, 4000A LT Control Panel	
<b>Condition of sample on Receipt</b>	New	
<b>Type</b>	PCC Cum MCC Panel	
<b>Designation</b>	Drawout cum fixed type	
<b>Serial number</b>	Krypton/50	
<b>Number of samples tested</b>	One	
<b>Date(s) of Test(s)</b>	21 <sup>st</sup> August 2014	
<b>CPRI sample code no.</b>	STDSSST214S0773	
<b>Particulars of tests conducted</b>	Verification of the short circuit withstand strength	
<b>Test in accordance with</b>	As per clause 8.2.3 of IS: 8623 (Part 1)-1993	
<b>Sampling plan</b>	Not applicable	
<b>Customer's requirement</b>	Nil	
<b>Deviations if any</b>	Nil	
<b>Name of the Witnessing persons</b>		
<b>Customer's representative</b>	Shri Kailash Sharma	
<b>Other than Customer's representatives</b>	Nil	
<b>Test subcontracted with address of the laboratory</b>	None	

**Documents constituting this report (in words)**

Number of sheets	Five
Number of oscillograms	Two
Number of graphs	Nil
Number of photos	One
Number of Test circuit diagrams	Two
Number of drawings	Three

  
(HIMANGSHU ROY)  
TEST ENGINEER



  
(ANUPAM AWASTHI)  
JOINT DIRECTOR

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**TEST REPORT**

Test Report Number S2140703

Date : 27 AUG 2014

**Summary of test**

Test conducted	Verification of the short circuit withstand strength
Rating for which tested	50 kArms for 1.0 second with initial peak of 105 kA
Documents constituting this report	
Oscillogram number	S2140703.S02, S04
Photograph numbers	P-1
Test circuit diagram number	OLTS/TCD-STC-01 & OLTS/TCD-STC-02
Drawing number	KPC/CPRI-TEST PANEL/14-15 Sheet 1 of 3 KPC/CPRI-TEST PANEL/14-15 Sheet 2 of 3 KPC/CPRI-TEST PANEL/14-15 Sheet 3 of 3

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**TEST REPORT**

Test Report Number S2140703

Date : 27 AUG 2014

**Ratings assigned by manufacturer**

Test sample	415V, 4000A, LT Control Panel
Type	PCC Cum MCC Panel
Designation	Drawout cum fixed type
Serial number	Krypton/50
Rated operational voltage	415 V
Rated current	4000 A
Rated insulation voltage	660 V
Rated frequency	50 Hz
Number of phases	Three phase + neutral
Rated short-time current	50 kArms for 1.0 second with initial peak of 105 kA

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**TEST REPORT**

Test Report Number S2140703

Date: 27 AUG 2014

**Verification of the short circuit withstand strength (cl. 8.2.3)**

**Test conditions:**

Condition of the sample : New  
No. of phases : Three & Neutral  
Source frequency : 50Hz.  
Transformer neutral & short circuit point : See test circuit diagram no. OLTS/TCD-STC-01 for three phase test and OLTS/TCD-STC-02 for single phase test  
Safety parameter : The sample was insulated from earth and connected to neutral of the supply via a fuse of 0.1mm diameter copper wire 50mm long in series with a resistor limiting the fault current to 100A

**Test results:**

Test results.

Oscillogram Number	Peak kA	RMS in kA			Duration (second)	Equivalent current in kArms for 1 second
		Ir	Iy	Ib		
Three phase Short circuit test on main circuit busbar of HBB+VBB+HBB (Peak in Y -phase)						
Test circuit diagram: OLTS/TCD-STC-01						
S2140703.S02	105.62	51.02	52.00	50.98	1.0	52.00
Single phase Short circuit test on neutral & nearest phase of main busbar of HBB+VBB+HBB						
Test circuit diagram: OLTS/TCD-STC-02						
S2140703.S04	63.75	30.69			1.0	30.69

**Observations**

During test : No abnormality.  
After test : No abnormality. Fine wire fuse Intact. All busbars & supports found intact.  
Remarks : After short circuit test the sample withstood HV test at 2.5 kVrms for one minute as per standard.

**Conclusion:** The test results indicate that the sample tested complies with the requirement of cl. 8.2.3 of the standard.

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Date: **27 AUG 2014**

**Note**

- a) The test results relate only to the item(s) tested.
- b) Publication or reproduction of this test report/ certificate in any form other than by complete set of the whole report and in the language written, is not permitted without the written consent of CPRI.
- c) Any correction/erasure invalidates this test report/certificate.
- d) NABL has Accredited this laboratory as per ISO 17025-2005 standard , vide certificate No.T-0011 for the tests carried out..
- e) The verification of the sample drawings by CPRI is limited to dimensional checks only wherever possible.
- f) Any anomaly/discrepancy in the test report/Certificate should be brought to the notice of CPRI within 45 days from the date of issue.
- g) CPRI issues two kinds of documents:


Test Report:

The test report will contain the record of the values of test parameters as obtained during testing, the physical condition of the apparatus during testing, the physical condition of the apparatus during/after the test(s), copy(ies) of Oscillogram(s), record of supplementary test(s) if any conducted but no certification on the performance of the apparatus tested

Type test Certificate:

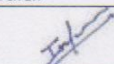

The test certificate is issued, on request and payment of the prescribed charges only when the apparatus of particular type and rating has satisfactorily passed all the specified tests in compliance with condition stipulated in a published National/International Standards.

- h) All Documents constituting this test report/certificate are stitched together with a continuous silk thread/ribbon, the two ends of which have been brought over the front sheet of this test report/certificate and sealed with a CPRI logo printed paper sticker/embossed.

  
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## TEST REPORT

Name & Address of the Client/Manufacturer	Krypton Power Controls (I) P.Ltd. 248, Swarn Park Udyog Nagar, Mundka, New Delhi-110041, India.	
Tested By	Irfan Jr.Engineer	
Reviewed By	Rakesh Chaurasia Operations Head - North	
Product Description		
Nomenclature of the Product	Empty Enclosure ( 500mm x 750mm x 250mm )	
Model No. /Type No.	---	
Serial No.(s)	---	
Quantity	One	
Total No. of Pages	05	
Year of Manufacture	2013	
Project Details		
Project Number	CE-JOB-DEL-13-000420	
Report Number	CE-JOB-DEL-13-000420-001	
Date of receipt of item	19.08.013	
Condition of item on its receipt	PHYSICALLY GOOD	
Date of completion of testing	30.08.2013	
Date of Issue	31.08.2013	
Testing Details		
Testing Location	Intertek India Private Limited E-20, B-1, Mohan Co-operative Industrial Estate New Delhi – 110044, India	
Details of Testing	IP 65	
Applicable Standard Specification	IEC 60529 Edition 2.1, 2001-02	

An independent organization testing for safety, performance, and certification.

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**Registered Off. :** Intertek India Private. Limited,  
E-20, Block B1, Mohan Co-operative Industrial Estate, Mathura Road,  
New Delhi-110 044, India  
Telephone: +91-11-4159 5460 Facsimile : +91-11-4159 5475 [www.intertek.com](http://www.intertek.com)





**Test Results:** Model No. Empty Enclosure (500mm x 750mm x 250mm)

S.No	Test	Test Conditions	Requirements	Observations	Remarks
1	IP 6X (Protection against Access to hazardous parts)	As per IEC 60529:2001	Enclosure should provide protection of persons against access to hazardous parts by preventing or limiting the ingress of a part of the human body or an object held by a person. Test wire of 1.0mm Ø shall not penetrate the enclosure and adequate clearance shall be kept between the test wire and hazardous parts.	The test finger did not penetrate inside UUT.	Pass
	IP 6 X (Protection against solid foreign body)	As per IEC 60529:2001	Enclosure should provide protection of equipment against the ingress of solid foreign objects. No dust shall deposit where it could lead to tracking along the creepage distances.	Category – I Equipment. No Ingress of Powder found inside the UUT.	Pass
2	IP X5	As per IEC 60529:2001	Enclosure should provide protection with respect to harmful effects on the equipments due to ingress of water.	No Ingress of water observed inside the UUT.	Pass

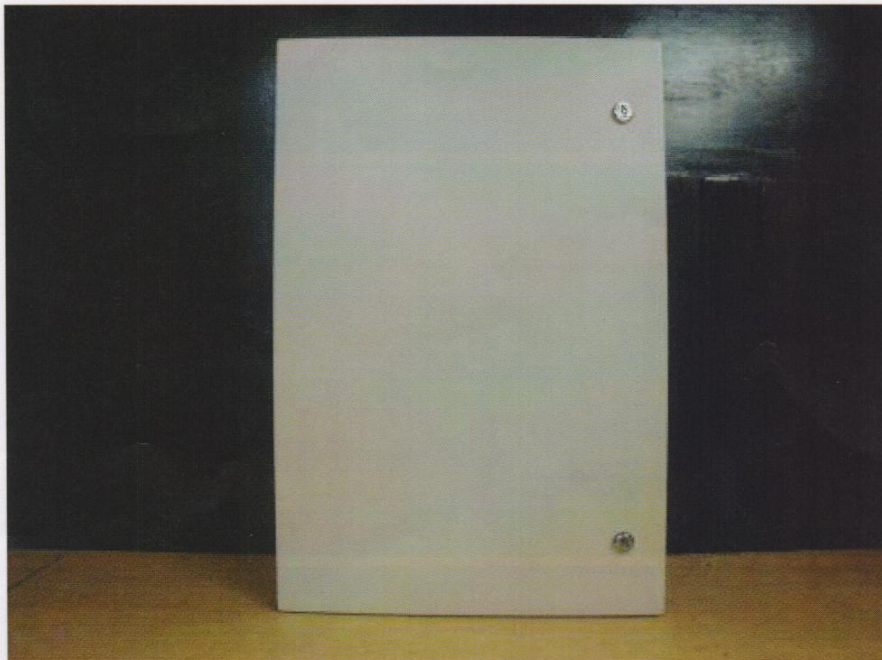
**REMARKS:**

- The test results presented in the test report relates only to the sample received for testing.

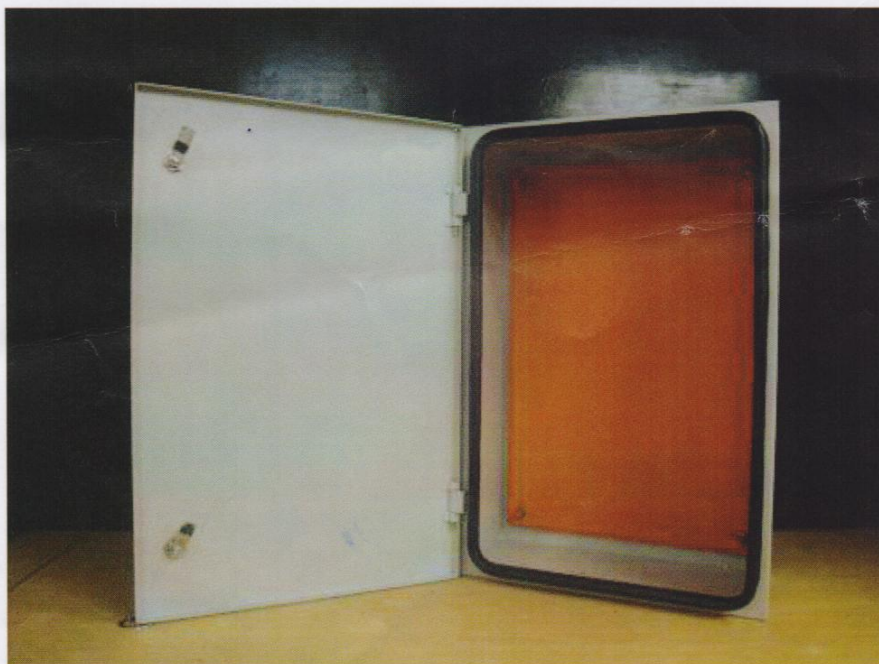


### Photographs

Model No. Empty Enclosure (500mm x 750mm x 250mm)



Front View



Internal View







# NABL

**National Accreditation Board for  
Testing and Calibration Laboratories**

Department of Science & Technology, India

## CERTIFICATE OF ACCREDITATION

### INTERTEK INDIA PRIVATE LIMITED

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2005**

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

E-20, Block B1, Mohan Co-operative Industrial Area, Mathura Road, New Delhi

in the discipline of

**ELECTRICAL TESTING**

(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

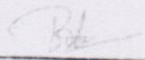
Certificate Number T-1199

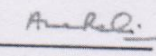
Issue Date 13/12/2012

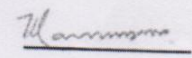
Valid Until 12/12/2014

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

  
Bibin Philip  
Convenor

  
Anil Relia  
Director

  
Dr. T. Ramasami  
Chairman



# NABL

Department of Science & Technology, India

## SCOPE OF ACCREDITATION

Laboratory Intertek India Private Limited, E-20, Block B1, Mohan Co-operative Industrial Area, Mathura Road, New Delhi

Accreditation Standard ISO/IEC 17025: 2005

Discipline Electrical Testing Issue Date 13.12.2012

Certificate Number T-1199 Valid Until 12.12.2014

Last Amended on - Page 55 of 76

S.No.	Product / Material of Test	Specific Test Performed	Test Method Specification against which tests are performed	Range of Testing / Limits of Detection
32.	Enclosures	Degree of Protection provided by Enclosures - Ingress of solid foreign objects, IP1X to 4X	EN 60529:1991+A1:2000 IEC 60529:2001 Add : IEC 60034-5 : 2000 + Amd.1 2006	0-25.4 mm/0.001mm 0-150mm/0.01mm
		Dust Protection IP5X-Dust Tight IP6X		Pressure : 1 mmH <sub>2</sub> O to 500mm H <sub>2</sub> O/1mm  0-150mm/0.01mm
		Ingress of Water - IPX1		Scale: 0-300 mm/1mm Time : 0-99.59 hrs/ 0.01 s
		Enclosure in fixed positions of tilt IPX2		Scale:0-300 mm/1mm Time : 0-99.59 hrs/ 0.01 s  Angle : 0-30deg/0.1deg
		Oscillating Tube Spray /Nozzle IPX3		Scale: 0-300 mm/1mm  Time : 0-99.59 hrs/ 0.01 s Volume : 0-10ltr/1ml
		Oscillating Tube Spray/Nozzle IPX4		Scale:0-300 mm/1mm  Time : 0-99.59 hrs/ 0.01 s Volume : 0-10ltr/1ml

  
Convenor





# Certificate of Registration

*This is to certify that  
The Quality Management Systems*

*Of*

**KRYPTON POWER CONTROLS  
(INDIA) PVT. LTD.**

*at*

**248, SWARAN PARK, UDYOG NAGAR,  
MUNDKA, NEW DELHI - 110 041  
(INDIA)**

*Has been found to conform to the Quality Management System Standard:*

**ISO 9001:2008**

*This certificate is valid for the following Product or Service ranges:*

**CONTROL PANEL MANUFACTURER & ELECTRICAL  
CONTRACTOR**

CERTIFICATE NO. : PCMS/QMS/1825-2014

ISSUED ON : 03/05/2014

VALIDITY DATE : 02/05/2017

1<sup>ST</sup> SURVEILLANCE DUE ON: 03/04/2015

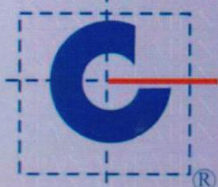
2<sup>ND</sup> SURVEILLANCE DUE ON: 03/04/2016

.....  
THE VALIDITY OF CERTIFICATE IS SUBJECT TO REGULAR SURVEILLANCE AUDIT ON OR BEFORE  
ABOVE MENTIONED DATES AND IT'S ONLY VALID AFTER SUCCESSFUL SURVEILLANCE WITH CONTINUATION  
LETTER ISSUED BY PCMS

AUTHORISED BY  
CHAIRMAN / DIRECTOR



JAS-ANZ



Acc.No. : - M3111204IN

**P.C MANAGEMENT SYSTEM PVT. LTD.**

134-A, II<sup>ND</sup> FLOOR, TAIMOOR NAGAR,  
NEW FRIENDS COLONY, NEW DELHI - 110 065 (INDIA)

THIS IS SINGLE-SITE CERTIFICATION  
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E-MAIL - PCMS@PCMSINDIA.COM